

What is claimed is:

1. A an electrical plug mechanism and an electrical receptacle for use in an electrical cell, comprising:

an electrical plug, having protruding plates, a plurality of holes, and

5 shafts corresponding to and traveling through the holes;

a plug guard, axially connected to the end surface of the electrical plug

and having hollow protrusions corresponding to the protruding plates and

grooves, and having holes corresponding to the shafts, the hollow

protrusions adapted to receive the protruding plates, and the shafts

10 inserted in the holes; and

an electrical receptacle, having holders corresponding to the protruding

plates and pins corresponding to the shafts;

whereby the electrical plug is inserted in the electrical receptacle to move

the shafts away from the holes of the plug guard, and the plug guard and

15 the electrical plug are axially rotated around each other to connect

electrically the protruding plates to the holders.

2. The mechanism as claimed in claim 1, wherein a plurality of

protuberances is positioned on the electrical plug and three grooves are

20 positioned on the electrical receptacle, whereby the protuberances of the

electrical plug are adapted to fit to the grooves of the electrical receptacle.

3. The mechanism as claimed in claim 1, wherein the electrical plug further
5 comprises a mounting portion including a plurality of holes and shafts
positioned in the holes.

4. The mechanism as claimed in claim 3, wherein a plurality of
protuberances are positioned near the mounting portion and the
10 protuberances correspond to the electrical receptacle, whereby guide
grooves of the receptacle portion are adapted to receive the
protuberances of the plug guard.

5. The mechanism as claimed in claim 1, wherein the holder has a U-shaped
15 holding portion and the planar portion integrally formed with the holding
portion, and the holding portion has two curved and symmetrical holding
planes adapted to receive the protruding plates.

6. The mechanism as claimed in claim 5, wherein a plurality of grooves and
20 a plurality of conductive beams are defined on the holder to place the

holder in electrical contact with the protruding plates.

7. The mechanism as claimed in claim 1, wherein the electrical plug further comprises a protrusion portion and a receptacle portion, and the protrusion portion is connected to an electrical cable and the receptacle portion has pins corresponding to the shafts and grooves adapted to receive the protuberances of the electrical plug, whereby holders are positioned between the protrusion portion and the receptacle portion and the electrical plug is electrically connected to the protruding plates.

8. The mechanism as claimed in claim 7, wherein the protrusion portion is electrically connected to the electrical cable and has a plurality of pins, whereby the holders pass through the protrusion portion.

9. The mechanism as claimed in claim 7, wherein the receptacle portion includes a plurality of circular apertures and a plurality of holder grooves, and the hollow protrusions of the plug guard correspond to the circular apertures, whereby the hollow protrusions are inserted in the circular apertures after the electrical plug is inserted in the electrical receptacle.

10. The mechanism as claimed in claim 7, wherein the receptacle portion is adapted to receive the electrical plug, and the guide grooves are defined on the receptacle portion and a plurality of pins extend from the receptacle portion.